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The Information Black Hole:

Managing the Issues Arising from the Increase in Electronic Data Discovery in Litigation

By Tracey L. Boyd*

"Broad discovery is a cornerstone of the litigation process contemplated by the Federal Rules of Civil Procedure."¹ The goal of such a liberal rule is to ensure that parties face a minimal burden in bringing a claim and are able to flesh out the claim through an expansive discovery process.²

increases exponentially until, in the end, "discovery is not just about uncovering the truth, but also about how much of the truth the parties can afford to disinter."⁶ As courts struggle with this issue, their ultimate goal is to balance the competing needs of broad discovery and manageable costs.⁷

"...the incredible increase in the quantity of discoverable information has thrown a kink in litigants' dependence on the ability to conduct broad discovery."

This Note explores the problems that the increase in electronic data discovery has created in litigation. In particular, this Note centers on the issue of cost-allocation involved when

Unfortunately, in an era when individuals and corporations conduct more and more of their business electronically,³ the incredible increase in the quantity of discoverable information has thrown a kink in litigants' dependence on the ability to conduct broad discovery.⁴ Requests for electronically stored data will almost definitely continue to swell as experts estimate that nearly one-third of all electronically stored information will never be printed in paper form by the computer's user.⁵ Discovery of electronically stored data is essential to litigants who could not otherwise find the same information through the traditional discovery process. As more information is available to discover, the cost

discovery includes electronically stored information. Part II of this Note contains a background discussion of the technical and legal aspects of the discovery of electronic information. It examines the different types of electronically stored data, the innate differences between traditional discovery and electronic discovery, and analyzes the Federal Rules of Civil Procedure as they apply to the discovery of electronically stored information. Next, this Note discusses several early cases in which courts struggled with discovery requests for electronic data and how to allocate the cost of such discovery. In Part III, this Note analyzes two recent cases in which courts have attempted to provide a workable solution to the problem of cost allocation by introducing balancing tests.

Finally, Part IV explores whether the solutions proposed in *Rowe* and *Zubulake* are practical and proposes an alternative recommendation to remedy the problem surrounding the allocation of discovery costs of electronically stored data.

I. Background

Although the process of electronic discovery bears many similarities to the traditional process, a close examination of the nature and number of difficulties that result from the differences between them reveals that electronic discovery warrants unique treatment.

A. Understanding the Technology Used By Businesses

Basic knowledge of electronic information and communication systems that businesses typically utilize is vital to fully understand the differences between electronic and traditional discovery. The three categories of electronic data most often used in modern discovery include (1) internally produced document storage; (2) e-mail; and (3) Internet access.⁸

1. *Internally Produced Document Storage.* Internally produced document storage can be analogized to the traditional method of retaining files that contain copies of paper-based written material.⁹ While the request of internally stored documents may be equivalent to a party's discovery request of another litigant's paper copies of written documents, there are noteworthy technological differences.¹⁰ Most significantly, because electronically stored documents are preserved on many levels, they are often incredibly difficult to retrieve.¹¹ In some instances, retrieval may require a company to

hire computer experts or forensic specialists who have the ability to examine a computer's hard drive.¹²

2. *E-mail.* E-mail is one of the most commonly requested forms of electronic discovery.¹³ Most e-mail programs retain a copy of all incoming and outgoing messages, even if the user has deleted the message.¹⁴ Additionally, the program records not only the contents of the message, but also the identity of the sender and recipient as well as the date and time of the message.¹⁵ Finally, e-mail is often used haphazardly by individuals who do not recognize its almost permanent quality.¹⁶ For these reasons, e-mail almost always contains crucial information and is intensely sought by parties to litigation.¹⁷

3. *Internet Access.* Frequently, it is advantageous for litigants to request access to records concerning an adverse party's Internet use.¹⁸ A computer's hard drive may store cache files, which provide a record of frequently visited websites; it may also create history files that document websites visited by the user; or websites themselves might keep log files of the visitors to their site.¹⁹

B. Major Differences Between Electronic and Traditional Discovery

While electronically stored data can be highly beneficial in litigation proceedings, its benefits often come at a cost and burden that are not typical of traditional discovery. The three major differences between electronic and traditional discovery include volume, retrieval, and translation.²⁰

1. *Volume.* In almost all cases, the

“...the courts have applied traditional discovery rules and held that inconvenience and expense are not valid reasons for the denial of electronic discovery.”

discovery of electronically stored information will result in the production of a substantial number of documents.²¹ Without question, the amount of discoverable information greatly exceeds the quantity that is available through traditional discovery.²² Several factors account for the increase in discoverable materials. Because electronic documents can be reproduced so easily, they "are likely to be stored in more locations, to be distributed to a wider audience, and to have more prior drafts retained than would paper documents."²³ Furthermore, the storage capacity created by electronic technology is incredible.²⁴ For

retrieval of electronically stored documents and traditionally stored paper documents are significant; solutions to the problem are not obvious.

3. *Translation and Production.* Because the great majority of electronically stored information has never been transformed into paper form, discovery would require the physical creation as a vital part of production.³¹ While production may sometimes be as simple as making a printout of a document, there are circumstances in which the producing party may have considerably more difficulty in extracting the requested information.³²

"In the past, courts have generally not treated electronic discovery differently than traditional discovery and have required the party responding to the discovery request to bear the full cost of preparing the response."

Moreover, in many instances the requesting party will want the information in both paper and electronic formats.³³ Certainly, the traditional discovery process never experienced the costs associated

example, an eight-millimeter backup tape can retain as much information as 1500 boxes of paper can hold.²⁵ Unlike paper copies, electronically stored data consumes very little physical space.²⁶ Businesses therefore preserve more documents for a longer period of time than they did traditionally.²⁷ The costs and burdens of electronic discovery are certain to increase substantially due to the sheer volume of electronically stored information.²⁸

2. *Retrieval.* As mentioned earlier, the retrieval of electronically stored data is often very costly because of the need to retain computer or forensic experts to work with the technology. While it is tempting to suggest that retrieval could be less costly if the requesting party is granted access to the producing party's data storage system, this solution is problematic.²⁹ It would allow an adversary to access information that would not otherwise be discoverable such as trade secrets, privileged material or proprietary information about the way the respondent uses computers to run its business.³⁰ Thus, the differences between

with translation and production.³⁴

C. Electronic Discovery in the Courts

Analyzing electronic discovery in the courts requires examining three distinct issues.³⁵ The first issue concerns the extent to which the existing discovery rules are applicable to electronic discovery.³⁶ The second concerns the likelihood that the courts will protect parties from overly burdensome or expensive discovery requests.³⁷ The third issue relates to the willingness of courts to shift the costs of electronic discovery from the producing party to the requesting party.³⁸ While this Note will primarily focus on the third issue, it is useful to examine the answers to the first two issues briefly..

1. *Discoverability of Electronic Evidence.* Rule 34 of the Federal Rules of Civil Procedure governs the production of documents and provides in part that "[a]ny party may serve on another party a request...to produce...any designated documents (including writings,

drawings, graphs, charts, photographs, phonorecords, and other data compilations from which information can be obtained, translated, if necessary, by the respondent through detection devices into reasonably usable form)."³⁹ While the Rule seems, at best, ambiguous about whether electronically stored information is discoverable, the 1970 amendment to Rule 34 expressly provides that Rule 34 applies to at least certain types of electronically stored material.⁴⁰ The Advisory Committee explained that the inclusive description of "documents" is revised to "accord with changing technology."⁴¹

2. Protecting the Producing Party from Burdensome Requests. In the past, courts have struggled to determine whether discovery of electronic evidence should be limited because it would be unjustifiably burdensome.⁴² In general, the courts have applied traditional discovery rules and held that inconvenience and expense are not valid reasons for the denial of electronic discovery.⁴³ These courts have failed to note that electronic discovery gives rise to an inherent set of difficulties not present in the traditional discovery process.⁴⁴

3. Cost-Shifting. Cost allocation of electronic discovery is an enormously important issue. The Advisory Committee Notes to Rule 34 provide that the producing party should bear the burden of complying with discovery requests.⁴⁵ In the past, courts have generally not treated electronic discovery differently than traditional discovery and have required the party responding to the discovery request to bear the full cost of preparing the response.⁴⁶ Rule 26(b)(1) of the Federal Rules of Civil Procedure defines the scope of discoverable information.⁴⁷ The Rule states that "[p]arties may obtain discovery regarding any matter, not privileged, that is relevant to the claim or defense of any party."⁴⁸ Rule 26(c) may be used by a party to attempt to shift the cost of production to the responding party.⁴⁹ The Rule states that "the court...may make any order which justice requires to protect a party or person from annoyance, embarrassment, oppression, or undue burden or expense."⁵⁰ Thus, the courts have discretion to shift costs where they deem necessary.⁵¹ However, the Rules do not provide any guidance for courts about how to exercise this discretion; thus,

courts are free to apply any rationale they choose in deciding how to allocate costs.⁵² Consequently, great uncertainty remains about what conditions are necessary for a court to find a discovery request for electronically stored information unduly burdensome or expensive.⁵³

One enormous problem that surfaced because of the inability of the Federal Rules to specifically address the unique problems faced in electronic discovery is the abuse of the discovery process.⁵⁴ Many plaintiffs have found that they can use Rule 34 to force defendants into settlement by presenting them with incredibly broad discovery requests for electronically stored information.⁵⁵ Rather than expend the enormous cost that would be required to comply with these discovery requests, many defendants choose to settle the case.⁵⁶

D. Representative Court Decisions Addressing Cost-Shifting in the Discovery of Electronically Stored Data

There have been several significant cases that illustrate the widely differing views that courts have taken on the issue of discovery requests for electronically stored data.

1. *Bills v. Kennecott Corp.*

Bills v. Kennecott Corp., a case from 1985 decided by the United States District Court for the District of Utah, considered a motion by the responding party to shift the cost of producing electronically stored information to the requesting party.⁵⁷ *Bills* was an age discrimination suit brought by a group of former employees against the corporation.⁵⁸ The plaintiffs requested production of documents containing information about numerous employees of Kennecott. The defendant agreed to comply by providing either a computer tape or a printout of the data.⁵⁹ However, the defendant refused to bear the cost of the production of this electronically stored information.⁶⁰ Plaintiffs also refused to pay the costs associated with the discovery.⁶¹ As a result, the defendant produced the requested information, but submitted a motion to the court asking it to exercise its discretion under Rule 26(c) to shift the costs incurred by

the defendant to the plaintiff.⁶²

Ultimately, the *Bills* court refused to shift the costs incurred by the defendant to the plaintiffs.⁶³ Although the court noted the significant cost-allocation differences innate in the discovery of electronically stored information, it decided that the producing party must show undue expense before courts will shift the costs to the requesting party.⁶⁴ The court expressed difficulty in determining what constitutes an undue expense due to the lack of guidance provided by the Federal Rules of Civil Procedure.⁶⁵ For this reason, the court acknowledged that it was not setting forth an "ironclad formula" for determining the definition of undue expense and recommended that courts resolve these questions on a case-by-case basis.⁶⁶

The *Bills* court set forth several factors that it deemed important in weighing the expense and burden on the responding party.⁶⁷ First, the *Bills* court considered whether the relative expense and burden in producing the electronically stored data would be considerably greater to the plaintiff than to the defendant.⁶⁸ Next, the court considered the amount of money involved in the case.⁶⁹ Finally, the court considered whether the defendant would benefit from producing the requested data.⁷⁰ In this case, the court determined that the cost involved was neither excessive nor inordinate; that the expense would be a substantial burden to the plaintiffs; and that the defendant would benefit from producing the requested information.⁷¹ For these reasons, the court denied defendant's motion and refused to shift the burden.⁷²

2. *In re Brand Name Prescription Drugs Antitrust Litigation*

The *Brand Name* case was decided ten years after *Bills* by the United States District

Court for the Northern District of Illinois.⁷³ The plaintiffs in the case filed a motion to compel the defendant to produce electronically stored e-mail messages.⁷⁴ Although the defendant agreed that the e-mails were generally discoverable, the defendant refused to produce the requested data because the request was "untimely, overly-broad, and overly-burdensome."⁷⁵

The *Brand Name* court first addressed the defendant's argument that the cost of retrieving the e-mails should be shifted to the class plaintiffs.⁷⁶ The defendant argued that it had at least thirty million pages of e-mail stored on backup tapes, which would cost between fifty and seventy thousand dollars to search in order to retrieve the information required by the discovery request.⁷⁷ Additionally, the defendant referred the court to the Manual for Complex Litigation, which proposes that reimbursement would be appropriate in a case similar to this one.⁷⁸

While the court agreed with the defendant that the Manual for Complex Litigation did lend some credence to their argument for cost-shifting, the court felt that prior case law, especially *Bills v. Kennecott Corp.*, was more persuasive.⁷⁹ The court felt that *Bills* was instructive on the determination of whether a discovery request is unduly

"...the court's reasoning in both cases, and especially *Brand Name*, illustrates the judiciary's lack of familiarity with and knowledge of computer technology."

burdensome or expensive enough to warrant shifting the cost to the requesting party.⁸⁰ In analyzing the issue, the court looked to several of the same factors set forth by the *Bills* court, including the following: whether the amount of money in question was excessive; whether the expense and burden incurred in obtaining the data would be greater to the requesting

party or the responding party; whether the amount of money in question would be a burden to the requesting party; and whether

stored information.⁸⁸

The *Bills* opinion seemed to address the numerous concerns that stem from the

“The Rowe court argued that the guiding principle here was that a party should be expected to respond to discovery requests at its own expense if it maintained electronic data for the purpose of utilizing it in connection with current business activities.”

allocation of discovery costs in the age of modern technology.⁸⁹ The *Bills* court recognized that the ever-increasing use of computers makes some traditionally viable cost-shifting tactics

the responding party would gain some benefit by producing the electronically stored data.⁸¹

In making their final determination, the court seemed to blame defendants for the cost of discovery because they chose an electronic storage method.⁸² The court therefore asserted that the defendants should bear the cost to retrieve and produce the requested information.⁸³ According to the court, the costs were a foreseeable consequence of the defendant's record-keeping scheme and storage method.⁸⁴ The court did not believe it was equitable to require the requesting party to bear the costs in a situation where they had no control over the storage method employed by the defendant.⁸⁵

E. Analysis of the *Bills* and *Brand Name* Decisions

Both *Bills* and *Brand Name* are instructive because they pinpoint problems that often lead to unsatisfactory results in courts' analyses of cost-shifting. First, the court's reasoning in both cases, particularly in *Brand Name*, illustrates the judiciary's lack of familiarity with and knowledge of computer technology.⁸⁶ A second reason for the inequitable decisions of the courts in dealing with electronic discovery and cost-shifting is the inability of the Federal Rules of Civil Procedure to address the relevant issues.⁸⁷ The Rules are extremely broad and fail to note the profound differences between traditional discovery and the discovery of electronically

less available than in the past.⁹⁰ For example, with traditional paper discovery, litigants could shift the burden to the requesting party by making their paper records available for inspection.⁹¹ Where electronically stored data is concerned, however, it would be far too dangerous to allow an adverse party access to the producing party's entire computer system.⁹² Therefore, Rule 26(c) is the only possible source of relief from burdensome or expensive discovery requests.⁹³ While the court eventually decided against cost-shifting in this case, this result can potentially be justified in part due to the relatively insubstantial cost that defendant incurred in complying with the discovery request.⁹⁴ In *Brand Name*, however, the amount in controversy was significantly more substantial.⁹⁵ The court articulated the factors set forth in *Bills* to make its final determination, but closer examination reveals that other archaic principles may have been at the heart of the court's conclusion.⁹⁶

First, the court referred to the defendant's use of computer systems as a "choice."⁹⁷ This terminology reflects the lack of understanding possessed by the judiciary with regard to modern technology.⁹⁸ To remain competitive and maintain a successful and thriving business, corporations simply must utilize computers in their operations.⁹⁹ The court seemed to punish the defendant for keeping pace with the normal practices of the time.¹⁰⁰ Furthermore, the defendant's argument for cost-shifting relied upon the Manual for Complex Litigation, which provides

that the requesting party should bear the costs of discovery if the request requires expensive additional programming for compliance.¹⁰¹ The situation clearly fit within the guidelines set forth in the manual; however, the *Brand Name* court deemed it more appropriate to look to persuasive case law without providing a clear reason for this choice.¹⁰²

F. *Anti-Monopoly, Inc. v. Hasbro, Inc.*: The Court Refuses to Place the Burden of Cost on the Producing Parties

In 1995, the District Court for the Southern District of New York decided *Anti-Monopoly, Inc. v. Hasbro, Inc.*, a decision which indicates greater judicial protection of the producing party against abusive discovery requests.¹⁰³ The plaintiff in this case requested from the defendant the production of certain electronically stored information that the defendant had already produced in printout form.¹⁰⁴ Although case law permitted this type of discovery,¹⁰⁵ the defendant argued that its situation was unique because the information was no longer available electronically.¹⁰⁶ Therefore, the defendant would be forced to recreate the data in electronic form to comply with the request at a substantial expense.¹⁰⁷ Ultimately, the *Anti-Monopoly* court required the plaintiff to pay the cost of creating computer programs to extract the relevant information from the defendant's computer system.¹⁰⁸ Though the *Anti-Monopoly* court did exercise its discretion to shift electronic discovery costs, the factual circumstances were unusual. At that point in time, the decision was clearly the exception to the general rule: that the burden of complying with discovery requests for electronically stored data rests with the producing party.¹⁰⁹

II. Analysis

The courts after *Anti-Monopoly* thus favored either one of two bright line approaches. The first approach held that the responding party should bear the costs of producing electronic discovery data because "if a party chooses an electronic storage method, the necessity for a retrieval program or method

is an ordinary and foreseeable risk."¹¹⁰ This argument was flawed because it assumed that the fact that the party was willing to bear the costs of retention was an indication that the information was useful to the responding party retaining the electronic data.¹¹¹ However, information was typically retained by parties because there was no convincing reason to discard it since the costs of electronic storage in general being incredibly low.¹¹² Thus, the argument that a party should bear the cost of producing electronic evidence simply because it retained the information was seriously flawed.¹¹³

Under the second approach, the requesting party bore the cost of producing electronic information because that party was in a better position to perform a cost-benefit analysis to decide whether the effort is justified.¹¹⁴ This argument was flawed for two fundamental reasons.¹¹⁵ First, this argument was contrary to the well-established rule that the responding party should bear the burden of production.¹¹⁶ Second, a rule that required the requesting party to bear the expense of production would be against public policy since it would result in "the abandonment of meritorious claims by litigants too poor to pay for necessary discovery."¹¹⁷

A. *Rowe Entertainment, Inc. v. William Morris Agency*: A 'Balanced' Approach to the Cost-Shifting Problem?

The court finally sought to establish a balancing test that would result in a fair distribution of the cost of electronic discovery in *Rowe Entertainment, Inc. v. William Morris Agency*.¹¹⁸ The plaintiffs in *Rowe* were African-American concert promoters who asserted that they had been excluded from the market for promoting events with white music artists by the racially discriminatory practices of the defendants, including booking talent agencies and other promoters.¹¹⁹ Plaintiffs' discovery demands were extremely broad and asked that the defendants retrieve e-mails from numerous back-up tapes.¹²⁰ Defendants argued that they should be relieved of responding to plaintiffs' requests because the burden and expense would outweigh the benefit.¹²¹ Alternatively, if the court decided discovery was appropriate,

the defendants asked that the plaintiffs bear the cost of discovery.¹²²

The *Rowe* court weighed eight factors in deciding whether to shift the cost of production to the requesting party:

(1) the specificity of the discovery requests; (2) the likelihood of discovering critical information; (3) the availability of such information from other sources; (4) the purposes for which the responding party maintains the requested data; (5) the relative benefit to the parties of obtaining the information; (6) the total cost associated with production; (7) the relative ability of each party to control costs and its incentive to do so; and (8) the resources available to each party.¹²³

The judge contended that each of these factors should be considered relevant and weighed equally in determining whether discovery costs should be shifted.¹²⁴

1. Factors Considered by the Court

a. Specificity

The *Rowe* court determined that the plaintiffs' incredibly broad discovery requests favored shifting costs to them under the theory that the less specific the requesting party's discovery demands, the more appropriate it is to shift the cost of production to them.¹²⁵ In considering this factor, the *Rowe* court contrasted the plaintiffs' discovery requests with requests in other cases where the court had declined to shift costs.¹²⁶

b. Likelihood of a Successful Search

The *Rowe* court utilized the marginal utility analysis set forth in *McPeck v. Ashcroft*, 202 F.R.D. 31, 34 (D.D.C. 2001) in determining whether to shift costs:

[t]he more likely it is that the backup tape contains information that is relevant to a claim or defense, the fairer it is that the [responding party]

search at its own expense. The less likely it is, the more unjust it would be to make [that party] search at its own expense. The difference is "at the margin."

Although the *Rowe* court determined that there was some probability that a broad search of the defendants' e-mails might produce relevant information, it determined that plaintiffs had not shown that any of the e-mails were likely to be a "gold mine" and thus decided this factor weighed in favor of imposing discovery costs on the plaintiffs.¹²⁷

c. Availability from Other Sources

On this factor, the *Rowe* court found that because defendants had not shown that either the e-mails or equivalent information was available or accessible in a different format at less expense, they should be required to produce the e-mails at their own expense.¹²⁸

d. Purposes of Retention

The *Rowe* court argued that the guiding principle here was that a party should be expected to respond to discovery requests at its own expense if it maintained electronic data for the purpose of utilizing it in connection with current business activities.¹²⁹ On the other hand, the *Rowe* court found that when a party retains information only for emergency purposes or because it neglected to discard it, cost-shifting would be warranted.¹³⁰ Therefore, the *Rowe* court held that cost-shifting was reasonable with respect to the back-up tapes.¹³¹

e. Benefit to the Parties

If the responding party benefits from the production of the materials requested, a court will find less of a reason to justify shifting costs to the requesting party.¹³² The benefit could either be collateral if, for example, the requested information would be useful in the regular activities of the business, or the responding party could benefit in litigation from the review of the requested materials.¹³³ In this case, the *Rowe* court found that neither benefit was present because the requested e-mails were not relevant to any issue on which

the defendants bore the burden of proof, nor would the e-mails have any business value to them; thus, cost-shifting was appropriate.¹³⁴

f. Total Costs

If the total cost of the requested discovery is not substantial, a court will be extremely hesitant to disregard the general presumption that the responding party should bear the cost of discovery.¹³⁵ As each defendant projected that plaintiffs' discovery requests could entail over \$150,000 in cost, the *Rowe* court held that the magnitude of the expense favored cost-shifting.¹³⁶

g. Ability to Control Costs

Where the discovery process can be incremental, a court generally finds that it is more efficient to "place the burden on the party that will decide how expansive the discovery will be."¹³⁷ The *Rowe* court argued that the plaintiffs were in a better position "to calibrate their discovery based on the information obtained from [an] initial sampling" and could thus decide to what extent further searches of the e-mails would be justified.¹³⁸

h. The Parties' Resources

The *Rowe* court noted that all parties to the litigation had sufficient resources to conduct discovery.¹³⁹ It noted, however, that weighing the parties' resources is not simply determining which party has more resources because sometimes "the cost, even if modest in absolute terms, might outstrip the resources of one of the parties, justifying an allocation of those expenses to the other."¹⁴⁰

Based on a consideration of the eight factors previously discussed, the court in *Rowe* held that the costs of discovery should be shifted to the plaintiffs.¹⁴¹

B. *Rowe* Reconsidered: *Zubulake v. UBS Warburg LLC*

Rowe's eight-factor test subsequently became the standard that courts universally applied to resolve electronic discovery disputes.¹⁴² Although *Rowe* was an influential and improved response to the problem of cost-shifting, it nonetheless drew criticism.¹⁴³ Critics of *Rowe* argued that the judgment weighed heavily in favor of cost-shifting.¹⁴⁴ The *Zubulake* court argued that: (1) "the *Rowe* test is incomplete;" (2) "courts have given equal weight to all of the factors, when certain factors should predominate;" and (3) "courts applying the *Rowe* test have not always developed a full factual record."¹⁴⁵ The *Zubulake* opinion compelled a fundamental change in the

"The *Zubulake* court held that cost-shifting should be considered only when electronic discovery imposes an "undue burden or expense" on the responding party."

approach that attorneys, litigants and the courts must take to electronic discovery.

The *Zubulake* court set forth a three-step analysis for disputes involving the scope and cost of electronic discovery.¹⁴⁶ First, the court must thoroughly understand the responding party's computer system, both with regard to active and stored data.¹⁴⁷ For data kept in an accessible format, the general principle by which the responding party pays for production applies.¹⁴⁸ Where the data requested is inaccessible, the court should consider cost-shifting.¹⁴⁹ Secondly, the court needs to determine what data might be found on the inaccessible media.¹⁵⁰ The *Zubulake* court reasoned that a sampling approach is sensible in most cases.¹⁵¹ Finally, the third step in the analysis is for the court to apply a seven factor cost-shifting test, modified from *Rowe*.¹⁵²

1. Should Cost-Shifting Be Considered?

The *Zubulake* court held that cost-shifting should be considered only when electronic discovery imposes an "undue burden or expense" on the responding party.¹⁵³ The *Zubulake* court further held that an undue burden or expense does not arise simply because electronic evidence is involved.¹⁵⁴ Rather, finding an undue burden turns primarily on whether the information is kept in an accessible or inaccessible format, as the court reasoned that such a distinction would correspond closely to the expense of production.¹⁵⁵

Noting that the accessibility of data usually depends on the media on which the data is stored, the court recognized five categories of stored data, ranging from the most accessible to least accessible for purposes of electronic discovery:¹⁵⁶

Active, online data: This data is available for access as it is created and stored. One example is the hard drive of a computer.¹⁵⁷

Near-line data: This data would usually be stored on removable media, with multiple read/write devices used to store and retrieve records.¹⁵⁸ An example would be an optical disk.¹⁵⁹

Offline storage/archives: This type of data, generally labeled and stored away, is traditionally used for disaster recovery or for records that have a minimal likelihood of retrieval.¹⁶⁰

Backup tapes: Data stored on backup tapes is difficult to access because it is not organized for retrieval of individual files or documents.¹⁶¹ "The organization of the data mirrors the computer's structure, not the human records management structure."¹⁶² Additionally, the data is typically compressed, which makes restoration more expensive and

time-consuming.¹⁶³

Erased, fragmented or damaged data: This data has usually been deleted by a computer user, but may still exist somewhere on the free space of the computer until it is overwritten by new data.¹⁶⁴ Access this type of data requires significant processing.¹⁶⁵ The *Zubulake* court held that the first three

"If the discovery request includes inaccessible data, *Zubulake* recommends that a 'sampling' approach should be used to determine what kinds of documents reside on the inaccessible media."

categories are considered accessible data, while the latter two are inaccessible.¹⁶⁶

2. Data Sampling

If the discovery request includes inaccessible data, *Zubulake* recommends a 'sampling' approach to determine what kinds of documents reside on the inaccessible media.¹⁶⁷ In *Zubulake*, a sampling approach resulted in an order to restore and search data from five backup tapes out of 94 available.¹⁶⁸ The *Zubulake* court reasoned that a sampling of the data on these five tapes would provide a factual basis on which to apply a cost-shifting analysis and would avoid guesswork.¹⁶⁹ A producing party may find that relevant data exists on the sampled backup tapes, which would require the court to move on to the next step in the cost-shifting analysis.¹⁷⁰ The sampling will also provide tangible evidence of the time and cost that will be required to restore the backup tapes.¹⁷¹ Conversely, sampling can be an effective shield when the requesting party seeks to cripple its opponent with an overly broad electronic discovery request.¹⁷²

3. A Modification of Rowe: A New Seven-Factor Test

In the third step of the cost-shifting analysis,

the court modified the eight factor test set forth in *Rowe*.¹⁷³ The court hoped to rework the test so that cost-shifting would not be favored as it was under the old test.¹⁷⁴

The modified

test included the following seven factors:

1. The extent to which the request is specifically tailored to discover relevant information;
2. The availability of such information from other sources;
3. The total cost of production, compared to the amount in controversy;
4. The total cost of production, compared to the resources available to each party;
5. The relative ability of each party to control costs and its incentive to do so;
6. The importance of the issues at stake in the litigation; and
7. The relative benefit to the parties of obtaining the information.¹⁷⁵

The *Zubulake* court stressed that all factors should not be weighed equally.¹⁷⁶ Instead, the court explained that the central question is whether "the request impose[s] an 'undue burden or expense' on the responding party[.] Put another way, how important is the sought-after evidence in comparison to the cost of production?"¹⁷⁷

With this consideration in mind, the *Zubulake* court stated that the first two factors, comprising a marginal utility test, are the most important.¹⁷⁸ The second part of the analysis should consider factors three, four, and five in making a determination of expense and relative ability to bear the burden of the expense.¹⁷⁹ According to the court, the sixth factor stands alone and has the potential to predominate over the other factors, but will rarely come into play.¹⁸⁰ For example, the sixth factor will come into play in a situation where the case has the potential for broad public impact.¹⁸¹ Finally, the seventh factor was deemed the least important due to the general presumption that

"Zubulake does not end the debate over electronic discovery cost-shifting."

the requesting party typically benefits from the response to a discovery request.¹⁸²

III. Recommendations

As the law and business worlds continue to adjust to the ever increasing role of technology, the case law will persistently face issues related to the discovery of electronic information. Currently, conflicting schools of thought exist regarding the cost allocation of discovery of electronically stored information.¹⁸³ Several scholars opine that the discovery rules should remain as they are and that courts should continue to construe them broadly.¹⁸⁴ These scholars also typically support a strict application of the general rule that the producing party should bear the burden of discovery costs, even if electronically stored information is involved.¹⁸⁵ Preceding portions of this Note, however, suggest that such an approach can create severe problems in litigation and also presents a possible means of discovery abuse.¹⁸⁶

Other scholars have suggested that changes to the current process of discovering electronically stored information are necessary. Many believe that the current discovery rules do not provide enough guidance to the litigating parties or to the judiciary.¹⁸⁷ These scholars suggest that changes to the discovery rules should address the issues and risks inherent in the nature of electronic data discovery.¹⁸⁸

Any changes to the Federal Rules of Civil Procedure with regard to the allocation of costs of electronically stored data would also require litigants to address potential problems

at the earliest stage of litigation rather than waiting until an issue arose. All too often, litigants are unaware of the scope of discoverable electronic information. Additionally, parties might be unaware of how much electronic data they have stored and/or the exact content of their files and backup tapes. Litigants who meet in the early stages of litigation will be better equipped to get their files in order, to determine what procedures they may need to comply with potential requests for electronically stored information, and to estimate the likely costs associated with producing the requested data.¹⁸⁹

A. *Zubulake's* Impact

Zubulake immediately impacted the application and perception of the Federal Rules of Civil Procedure by courts and litigants that were engaged in the debate over the Rules' adequacy in providing guidance over electronic discovery cost-shifting disputes.¹⁹⁰ Not only does *Zubulake* validate the idea that the Rules are as pertinent to electronic discovery as to paper discovery, but it also influences the application of the Rules by interpreting them in light of the distinctions between electronic evidence and paper evidence.¹⁹¹

Despite its successes, *Zubulake* does not end the debate over electronic discovery cost-shifting. Though the decision by the Southern District of New York provides guidance to other courts around the country facing similar cost allocation disputes, *Zubulake* is not binding; other courts are free to come up with their own tests.¹⁹² Courts and litigants would be better served by amendments to the Federal Rules of Civil Procedure that could provide uniformity and prevent forum shopping that might occur due to different cost-shifting tests being applied in different jurisdictions.

B. Amending the Federal Rules of Civil Procedure

Amendments to the Federal Rules of Civil Procedure would provide a workable solution because such amendments would provide courts with specific guidelines to consider when presented with electronic data cost-allocation decisions.¹⁹³ The spirited discussion of electronic discovery in case law has led the Civil Rules Advisory Committee to

focus on considered amendments to the Federal Rules to address discovery of electronically stored information.¹⁹⁴

The minutes of the Committee's May 2003 meeting shed some light on the issues that the draft rules may address.¹⁹⁵ Specifically, the Committee considered seven areas "as the most promising topics to consider for draft rule provisions."¹⁹⁶ The first area involves requiring the litigants to confer about any possible electronic discovery at the commencement of action, for example at the Rule 26 conference.¹⁹⁷ A second area calls for revisions to Rule 26(a)(1) to compel disclosure regarding the parties' computer systems.¹⁹⁸ The third area would require clarification about the definition of a "document," specifically considering whether it includes deleted information and backup tapes.¹⁹⁹ The fourth area deals with the production of electronic documents, and tackles questions such as whether appropriate software must be provided by one of the parties and how to produce a database.²⁰⁰ In the fifth area, the Committee considered whether "heroic efforts" should be required to retrieve electronically stored information.²⁰¹ The sixth area addresses protections that are needed to ensure that privileged documents are not inadvertently produced along with other electronic documents.²⁰² Finally, the seventh area of concern considers creating a "safe harbor" rule.²⁰³

IV. Conclusion

This Note makes it clear that the allocation of electronic data discovery costs is still a major issue with which courts grapple regularly. At the outset, courts faced difficulties because the Federal Rules of Civil Procedure are incredibly broad and do not always provide clear guidance. Further problems stem from the fact that courts and the judiciary were initially ill equipped to deal with the technical aspects of electronic discovery. Judges did not possess a practical understanding of the electronic information and communication systems that individuals and corporations were utilizing on a day-to-day basis. These factors led courts to be inconsistent in their resolution of cost allocation problems in various early cases. More recently, however, courts seem to

be gaining a greater appreciation for technological advances and the practical impact they have had on the discovery process.

Still, there is no unique solution to the costly problems associated with electronic data discovery allocation decisions. Amendments to the Federal Rules of Civil Procedure are favorable because they would provide much needed guidance to courts faced with cost allocation issues regarding electronic discovery. Additionally, amendments to the Rules requiring parties to address electronic data discovery requests at the onset of litigation would be useful. Such requirements ensure that the parties would be better prepared and informed about the possibility of electronic discovery requests in their suits. If the issues are brought to the forefront immediately and the parties are well informed, this also facilitates a greater likelihood that the parties can reach an agreement concerning cost allocation without having to resort to the courts for a solution.

ENDNOTES

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¹ Jones v. Goord, 2002 U.S. Dist. LEXIS 8707, at *1 (S.D.N.Y. May 16, 2002); see Swierkiewicz v. Sorema, N.A., 534 U.S. 506, 512 (2002).

² See Hickman v. Taylor, 329 U.S. 495, 500–01 (1947).

³ See Wendy R. Liebowitz, *Digital Discovery Starts to Work*, NAT'L L.J., Nov. 4, 2002, at C3 (reporting that in 1999, ninety-three percent of all information generated was in digital form).

⁴ See Rowe Entm't, Inc. v. William Morris Agency, Inc., 205 F.R.D. 421, 429 (S.D.N.Y. 2002).

⁵ See Corinne L. Giacobbe, Note, *Allocating Discovery Costs in the Computer Age: Deciding Who Should Bear the Costs of Discovery of Electronically Stored Data*, 57 WASH. & LEE L. REV. 257, 259 (2000).

⁶ Rowe Entm't, Inc., 205 F.R.D. at 423.

⁷ Zumbulake v. UBS Warburg, 217 F.R.D. 309, 311 (S.D.N.Y. 2003).

⁸ Martin H. Redish, *Electronic Discovery and the Litigation Matrix*, 51 DUKE L.J. 561, 583 (2001).

⁹ *Id.* at 584.

¹⁰ *Id.*

¹¹ See generally Marnie H. Pulver, Note, *Electronic Media Discovery: The Economic Benefit of Pay-Per-View*, 21 CARDOZO L. REV. 1379, 1406–17 (2000) (discussing types of data stored and how to retrieve it.).

¹² See *id.* at 1411 (“Specialists utilize certain tools to examine the entire drive for important data because neither simple copy commands, not commercial backup programs, capture deleted files.”).

¹³ Redish, *supra* note 8, at 588.

¹⁴ *Id.* at 587.

¹⁵ *Id.*

¹⁶ See *id.* at 588.

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ See generally Shira A. Scheindlin & Jeffrey Rabkin, *Electronic Discovery in Federal Civil Litigation: Is Rule 34 Up to the Task?*, 41 B.C. L. REV. 327 (2000).

²⁰ Redish, *supra* note 8, at 589.

²¹ See *id.*

²² See Giacobbe, *supra* note 5, at 262–65.

²³ Redish, *supra* note 8, at 589.

²⁴ *Id.* at 590.

²⁵ Giacobbe, *supra* note 5, at 263.

²⁶ *Id.* at 262.

²⁷ See generally *id.*

²⁸ See Redish, *supra* note 8, at 590.

²⁹ *Id.* at 591; Scheindlin, *supra* note 19, at 348.

³⁰ Scheindlin, *supra* note 19, at 348.

³¹ Redish, *supra* note 8, at 591.

³² *Id.*; see Giacobbe, *supra* note 5, at 262 (“A requirement that the data be in electronic form also increases the cost of discovery because production often can entail creating complex computer programs to convert the electronic data from its current format to an electronic format that the requesting party can use.”).

³³ See Giacobbe, *supra* note 5, at 262 (noting that “[e]ven though many companies and individuals continue to store paper copies of various documents, it is important to recognize that even if a litigant properly makes the information available to the requesting party in paper form, an adversary still can demand the same information in a usable electronic format”).

³⁴ Redish, *supra* note 8, at 592.

³⁵ See *id.* at 571.

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ FED. R. CIV. P. 34(a) (2004).

⁴⁰ FED. R. CIV. P. 34 advisory committee’s note (1970 Amendment).

⁴¹ *Id.*

⁴² Redish, *supra* note 8, at 574.

⁴³ *Id.* at 575.

⁴⁴ *Id.*; see also Giacobbe, *supra* note 5, at 267.

⁴⁵ See FED. R. CIV. P. 34 advisory committee’s notes (1970 Amendment) (explaining that respondent bears burden of production of electronically

stored data, but courts can shift costs to discovering party under Rule 26(c)).

⁴⁶ See Redish, *supra* note 8, at 578.

⁴⁷ FED. R. CIV. P. 26(b)(1).

⁴⁸ *Id.*

⁴⁹ FED. R. CIV. P. 26(c).

⁵⁰ *Id.*

⁵¹ See Redish, *supra* note 8, at 578–79.

⁵² *Id.*

⁵³ Giacobbe, *supra* note 5, at 269.

⁵⁴ *Id.* at 267.

⁵⁵ *Id.* at 268.

⁵⁶ *Id.*

⁵⁷ *Bills v. Kennecott Corp.*, 108 F.R.D. 459 (D. Utah 1985).

⁵⁸ *Id.* at 460.

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.* at 464.

⁶⁴ Giacobbe, *supra* note 5, at 273.

⁶⁵ See *id.*

⁶⁶ *Bills*, 108 F.R.D. at 463. (The court explained that, “[s]uch a formula would be judicially imprudent and wholly impractical in view of the diverse nature of the claims, discovery requests and parties before the [c]ourts in a variety of cases and situations.”).

⁶⁷ See Giacobbe, *supra* note 5, at 273–74.

⁶⁸ *Bills*, 108 F.R.D. at 464.

⁶⁹ See *id.* at 464.

⁷⁰ See *id.*

⁷¹ See Giacobbe, *supra* note 5, at 274.

⁷² *Id.*

⁷³ *In re Brand Name Prescription Drugs Antitrust Litig.* No. 94-C897, 1995 WL 360526, at *3 (N.D. Ill. June 15, 1995) [hereinafter *Brand Name Prescription Drugs*].

⁷⁴ *Id.* at *1.

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.* The defendant explained that complying with the discovery request would entail searching the e-mail data contained on the backup tapes, eliminating the duplicate messages, compiling, formatting, and retrieving the appropriate data requested.

⁷⁸ *Id.* at *2.

⁷⁹ See Giacobbe, *supra* note 5, at 276.

⁸⁰ See *Brand Name Prescription Drugs*, 1995 WL 360526, at *2.

⁸¹ *Id.*

⁸² Giacobbe, *supra* note 5, at 277.

⁸³ See *Brand Name Prescription Drugs*, 1995 WL 360526, at *2.

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ See Giacobbe, *supra* note 5, at 280–81.

⁸⁷ See *id.* at 281.

⁸⁸ See Mark D. Robins, *Computers and the Discovery of Evidence—A new Dimension to Civil Procedure*, 17 J. MARSHALL J. COMPUTER & INFO. L. 411, 483 (1999) (explaining that unless things change, “courts will continue to balance...

factors...in an ad hoc fashion, while avoiding the question of whether a fundamental recalibration is needed.”).

⁸⁹ See Giacobbe, *supra* note 5, at 283.

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ *Id.* at 284.

⁹⁷ See *Brand Name Prescription Drugs*, 1995 WL 360526, at *2.

⁹⁸ See Giacobbe, *supra* note 5, at 285.

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *Id.* at 284.

¹⁰² *Id.*

¹⁰³ *Anti-Monopoly, Inc. v. Hasbro, Inc.*, No. 94 CIV. 2120, 1995 WL 649934, at *1 (S.D.N.Y. Nov. 3, 1995).

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* at *2 (“production of information in ‘hard copy’ documentary form does not preclude a party from receiving that same information in computerized/electronic form.”); see *Nat’l Union Elec. Corp. v. Matsushita Elec. Indus. Co.*, 494 F. Supp. 1257, 1261 (E.D. Pa. 1980).

¹⁰⁶ *Anti-Monopoly, Inc.*, 1995 WL 649934, at *2.

¹⁰⁷ *Id.* at *3.

¹⁰⁸ Redish, *supra* note 8, at 579.

¹⁰⁹ See Giacobbe, *supra* note 5, at 292–93.

¹¹⁰ *Brand Name Prescription Drugs*, 1995 WL 360526, at *2.

¹¹¹ See *Rowe Entm't, Inc. v. William Morris Agency, Inc.*, 205 F.R.D. 421, 429 (S.D.N.Y. 2002); see also *McPeck v. Ashcroft*, 202 F.R.D. 31, 32 (D.D.C. 2001) ("The purpose of having a backup system and retaining the tapes was to permit recovery from a disaster, not archival preservation.").

¹¹² *Rowe Entm't, Inc.*, 205 F.R.D. at 429.

¹¹³ *Id.*

¹¹⁴ See *Pulver*, *supra* note 11 at 1424.

¹¹⁵ *Rowe Entm't, Inc.*, 205 F.R.D. at 429.

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ *Id.*

¹¹⁹ *Id.* at 423.

¹²⁰ *Id.* at 424.

¹²¹ *Id.*

¹²² *Id.* (Each of the four named defendants projected that the cost of complying with plaintiffs' discovery requests could be in excess of \$150,000.)

¹²³ *Id.* at 429.

¹²⁴ *Id.*

¹²⁵ *Id.* at 429–30.

¹²⁶ *Id.* at 430; see *Daewoo Electronics Co., Ltd v. United States*, 650 F. Supp. 1003, 1004-05 (C.I.T. 1986) (where plaintiff sought only specific data sets which the court considered targeted, rather than expansive, discovery).

¹²⁷ *Rowe Entm't, Inc.*, 205 F.R.D. at 430.

¹²⁸ *Id.*

¹²⁹ *Id.* at 430–31.

¹³⁰ *Id.* at 431.

¹³¹ *Id.*

¹³² *Bills v. Kennecott Corp.*, 108 F.R.D. 459, 464 (D. Utah 1985).

¹³³ *Rowe Entm't, Inc.*, 205 F.R.D. at 431.

¹³⁴ *Id.*

¹³⁵ *Anti-Monopoly, Inc. v. Hasbro, Inc.*, No. 94 CIV. 2120, 1995 WL 649934, at *2 (S.D.N.Y. Nov. 3, 1995); *Bills*, 108 F.R.D. at 464.

¹³⁶ *Rowe Entm't, Inc.*, 205 F.R.D. at 431.

¹³⁷ Cf. *Bills*, 108 F.R.D. at 464 (declining to shift costs where "[t]he relative expense and burden in obtaining the data would be substantially greater to the requesting party as compared with the responding party.").

¹³⁸ *Rowe Entm't, Inc.*, 205 F.R.D. at 432; see *McPeck v. Ashcroft*, 202 F.R.D. 31, 33 (D.D.C. 2001) (requiring producing party to pay all costs is disincentive to requesting party to narrow its demands).

¹³⁹ *Rowe Entm't, Inc.*, 205 F.R.D. at 432.

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² See generally *In re Livent, Inc. Noteholders Sec. Litig.*, No. 98 Civ. 7161, 2003 WL 23254, at *3 (S.D.N.Y. 2003); *In re Bristol-Myers Squibb Sec. Litig.*, 205 F.R.D. 437, 443 (D. N.J. 2002).

¹⁴³ See *Zubulake v. UBS Warburg LLC*, 217 F.R.D. 309 (S.D.N.Y. 2003).

¹⁴⁴ *Id.*, at 320. ("Indeed, of the handful of reported opinions that apply *Rowe* or some modification thereof, *all of them* have ordered the cost of discovery to be shifted to the requesting party.").

¹⁴⁵ *Id.* (emphasis added).

¹⁴⁶ *Id.* at 324.

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

¹⁵² *Id.*

¹⁵³ *Id.* at 317.

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ *Id.* at 318

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Id.* at 318–19.

¹⁶² *Id.* at 319.

¹⁶³ *Id.*

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ *Id.*

¹⁶⁷ *Id.* at 324.

¹⁶⁸ *Id.* at 325.

¹⁶⁹ *Id.* at 324.

¹⁷⁰ *Id.*

¹⁷¹ *Id.*

¹⁷² See Virginia Llewellyn, ‘Zubulake’ Helps Clarify Who Pays for What in E-Discovery, N.Y. L. J., June 17, 2003.

¹⁷³ *Zubulake*, 217 F.R.D. at 321.

¹⁷⁴ *Id.*

¹⁷⁵ *Id.* at 322.

¹⁷⁶ *Id.*

¹⁷⁷ *Id.*

¹⁷⁸ *Id.* 323.

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*

¹⁸¹ *Id.* at 320

¹⁸² *Id.* at 323.

¹⁸³ See *Giacobbe*, *supra* note 5, at 296.

¹⁸⁴ *Id.*

¹⁸⁵ See *id.*

¹⁸⁶ See *id.* at 296–97; see also *supra* notes 54–56 and accompanying text (explaining ways in which plaintiffs use electronic discovery requests to force defendants into settlement).

¹⁸⁷ See *Robins*, *supra* note 88, at 473 (stating that the guidance the discovery rules provide with regard to cost-allocation issues is uncertain).

¹⁸⁸ See *id.* at 483 (suggesting that “courts must balance the need to preserve inexpensive access to relevant information that has traditionally been available at little expense in conventional discovery with the need to avoid penalizing the use of new technologies with whose evolution the Rules have not kept pace”).

¹⁸⁹ See *Giacobbe*, *supra* note 5, at 302.

¹⁹⁰ Bahar Shariati, Note, *Zubulake v. UBS Warburg: Evidence that the Federal Rules of Civil Procedure Provide the Means for Determining Cost Allocation in Electronic Discovery Disputes?*, 49 VILL. L. REV. 393, 425–26 (2004); see *Open TV v. Liberate Techs.*, 219 F.R.D. 474, 476 (N.D. Cal 2003) (Adopting the cost-shifting approach set forth in *Zubulake I*, the court reasoned that

cost shifting should be considered only when inaccessible data is sought. Finding that the source code was effectively “inaccessible” for purposes of discovery in this case, the court applied the seven-factor cost-shifting test set out in *Zubulake II* to determine whether plaintiff should bear some or all of the costs of production of the requested data.).

¹⁹¹ See Shariati, *supra* note 190, at 426. See generally *Zubulake v. UBS Warburg LLC*, 217 F.R.D. 309 (S.D.N.Y. 2003).

¹⁹² See *Multitechnology Servs. v. Verizon Southwest*, 2004 U.S. Dist. LEXIS 12957 (D. Tex. July 12, 2004) (refusing to follow *Zubulake* on grounds that “*Zubulake* is a district court opinion without binding authority.”).

¹⁹³ See *Giacobbe*, *supra* note 5 at 297.

¹⁹⁴ See Civil Rules Advisory Committee, Minutes at 24–26 (May 1-2, 2003), available at <http://www.uscourts.gov/rules/Minutes/CRAC0503.pdf> (discussion on discovery of computer-based information, recounting the Discovery Subcommittee’s previous meetings).

¹⁹⁵ *Id.* at 25.

¹⁹⁶ See *id.*

¹⁹⁷ See *id.*

¹⁹⁸ See *id.*

¹⁹⁹ See *id.*

²⁰⁰ See *id.*

²⁰¹ See *id.*

²⁰² See *id.*

²⁰³ See *id.* at 25–26; see Preliminary Draft of Proposed Amendments to the Federal Rules of Practice and Procedure, Administrative Offices of the U.S. Courts, August 2004, available at <http://www.uscourts.gov/rules> (In August 2004, The Judicial Conference’s Advisory Committee on Civil Rules proposed amendments to various rules designed to bring guidance and clarity to the electronic discovery

process. While proposals were made to amend Rules 16, 26, 33, 34, and 45, the proposal to amend Rule 37 has drawn the most attention. This “safe harbor” provision provides that “unless a court order requiring preservation of electronically stored information is violated, the court may not impose sanctions under these rules on a party when such information is lost because of the routine operations of its electronic information system if the party took reasonable steps to preserve discoverable information.”).

